Abstract ID : 243

Title : DUSKY DOLPHINS (LAGENORHYNCHUS OBSCURUS) CHASING HORSE MACKEREL (TRACHURUS TRACHURUS CAPENSIS) IN DEEP WATER

Category : Behavior

Student : Not Applicable

Preferred Format : Either Oral or Poster Presentation

Abstract : During field-work on the Norwegian research vessel "Dr. Fridtjof Nansen" in September 2002, groups (<20 ind.) of dusky dolphins (Lagenorhynchus obscurus) was observed acoustically while attacking a school of Cape horse mackerel (Trachurus trachurus capensis) in coastal waters at the border between Angola and Namibia. The bottom depth in the area is about 170 m. The vessel was drifting passively across extensive aggregations of horse mackerel during the attack events. The predator-prey interactions were recorded continuously using an echosounder operating at 18, 38, 120 and 200 kHz. The acoustical observations were supplemented by visual observations of surfacing dolphins. The dolphins attacked from below the horse mackerel schools, swimming at a depth of about 125 m. Avoidance reactions by the horse mackerel schools to the dolphin attack were seen as rapid dives towards the sea bottom, exceeding 60 m in vertical extent. This was probably to avoid beeing atached from below or/and to reduce biosonar detection close to the bottom. Within few minutes, the horse mackerel returned to about 125 m water depths, forming small and dense schools (tight balls). The observations show that dusky dolphins are capable of hunting their prey down to at least a depth of 170 m. Consequently, their swimming speed must be quite fast, as the dolphins can only stay submerged for a few minutes. The observations show that Cape horse mackerel may carry out rapid vertical movements and that schools are fragmented into smaller units during cetacean attacks. Our observations, made both by night and day, strongly suggest that the dolphins took advantage of their bio-sonar to locate and hunt their prey.